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1 Claims

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1. A water treatment system comprising a host
water treatment apparatus and a separable water
treatment component, said component being
useable in the host apparatus, wherein the
component has an electronic circuit adapted to
co-operate with an electronic circuit in the
host apparatus.

10

11 2. A water treatment system as claimed in Claim 1
12 wherein the co-operation between the component
13 and the host apparatus is either one way or
14 two-way.

15

3. A water treatment system as claimed in Claim 1 or Claim 2 wherein the component circuit and the host circuit communicate via one or more of the following transmittable waveforms: radio, infrared, optical and magnetic.

21

4. A water treatment system as claimed Claim 1 or
Claim 2 wherein the component circuit and the
host circuit communicate by physical electrical
contact.

26

27 5. A water treatment system as claimed in any one
28 of the preceding Claims wherein co-operation of
29 the component circuit and the host circuit is
30 only possible when the component is conjoined
31 with the host apparatus.

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| 1  | 6.  | A water treatment system as claimed in any one  |
|----|-----|---|
| 2  |     | of the preceding Claims wherein the component   |
| 3  |     | circuit and/or the host circuit includes a      |
| 4  |     | memory capacity.                                |
| 5  |     |   |
| 6  | 7.  | A water treatment system as claimed in any one  |
| 7  |     | of the preceding Claims wherein each electronic |
| 8  |     | circuit can read and/or interrogate the other   |
| 9  |     | electrical circuit.                             |
| 10 |     |   |
| 11 | 8.  | A water treatment system as claimed in any one  |
| 12 |     | of the preceding Claims wherein the electrical  |
| 13 |     | circuit in the host apparatus includes a        |
| 14 |     | central processor, and the electrical circuit   |
| 15 |     | in the component includes a data chip.          |
| 16 |     | ·   |
| 17 | 9.  | A water treatment system as claimed in any one  |
| 18 |     | of the preceding Claims wherein the electronic  |
| 19 |     | circuit of the component provides an enablement |
| 20 |     | signal to the electronic circuit of the host    |
| 21 |     | apparatus, and/or vice versa.                   |
| 22 |     |   |
| 23 | 10. | A water treatment system as claimed in Claim 9  |
| 24 |     | wherein the enablement signal includes means    |
| 25 |     | for the component or host apparatus to control  |
| 26 |     | the other part.                                 |
| 27 |     |   |
| 28 | 11. | A water treatment system as claimed any one of  |
| 29 |     | the preceding Claims wherein the component and  |
| 30 |     | host inter-co-operate.                          |
| 31 |     |   |

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1 12. A water treatment system as claimed in any one of the preceding Claims wherein the electronic circuit of the component includes at least a data tag.

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13. A water treatment system as claimed in Claim 12
wherein presence of the data tag is identified
by the electronic circuit of the host
apparatus.

10

14. A water treatment system as claimed in any one
12 of the preceding Claims wherein lack of co13 operation between the electronic circuit of the
14 component and electronic circuit of the host
15 apparatus indicates the incorrect fitment
16 and/or installation of the component with the
17 host apparatus.

18

19 . 15. A water treatment system as claimed in any one
20 of the preceding Claims wherein lack of co21 operation between the electronic circuit of the
22 component and the electronic circuit of the
23 unit identifies incorrect operation of the
24 component and/or the host apparatus.

25

26 16. A water treatment system as claimed in any one 27 of the preceding Claims wherein information in 28 the component is accessed from the component 29 and displayed by the host apparatus.

30

31 17. A water treatment system as claimed in any one
32 of the preceding Claims wherein information

that is communicated between the electronic
circuits of the component and the host
apparatus is validation information, production
information and/or manufacturing information.

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18. A host water treatment apparatus useable with a

water treatment component to provide a water

treatment system, said host apparatus having a

electronic circuit adapted to co-operate with

an electronic circuit in the component in a

manner as defined in any one of Claims 1 to 17.

12

19. A separable treatment component useable with a host water treatment apparatus, said component having an electronic circuit adapted to cooperate with an electronic circuit in the host apparatus.

18

20. A treatment component as claimed in Claim 19
wherein the component is a water treatment
component adapted to provide a water treatment
system in co-operation with the host apparatus.

23

24 21. A treatment component as claimed in Claim 19
25 wherein the component is adapted to sanitise
26 and/or clean one or more parts of the host
27 apparatus.

28

29 22. A treatment component as claimed in any one of 30 Claims 19 to 21 wherein the electronic circuits 31 co-operate in a manner as defined in any one of 32 Claims 1 to 17. WO 03/076342 PCT/GB03/00975

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| 1  |     |   |
|----|-----|---|
| 2  | 23. | A treatment component as claimed in any one of  |
| 3  |     | Claims 19 to 22 wherein the electronic circuit  |
| 4  |     | of the component is integral with the           |
| 5  |     | component.                                      |
| 6  | ,   |   |
| 7  | 24. | A treatment component as claimed in Claim 23    |
| 8  |     | wherein the electronic circuit is embedded into |
| 9  |     | or mounted onto the component.                  |
| 10 |     |   |
| 11 | 25. | A treatment component as claimed in any one of  |
| 12 |     | Claims 19 to 24 wherein the electronic circuit  |
| 13 |     | of the component includes a database having     |
| 14 |     | characterising data relating to the component.  |
| 15 |     |   |
| 16 | 26. | A treatment component as claimed in any one of  |
| 17 |     | Claims 19 to 25 wherein the data of the         |
| 18 |     | component electronic circuit is encrypted.      |
| 19 |     |   |
| 20 | 27. | A treatment component as claimed in any one of  |
| 21 |     | Claims 19 to 26 wherein the component is a      |
| 22 |     | consumable replaceable unit.                    |
| 23 |     | •   |
| 24 | 28. | A treatment component as claimed in Claim 27    |
| 25 |     | wherein the component is a cartridge.           |
| 26 |     |   |
| 27 | 29. | A water treatment component substantially as    |
| 28 |     | hereindescribed and with reference to Figure 1  |